

PEER REVIEW HISTORY

BMJ Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form (<http://bmjopen.bmj.com/site/about/resources/checklist.pdf>) and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below.

ARTICLE DETAILS

TITLE (PROVISIONAL)	Human Papillomavirus Self-sampling for Cervical Cancer Screening among Women in sub-Saharan Africa: A Scoping Review Protocol
AUTHORS	Dzobo, Mathias; Dzinamarira, Tafadzwa; Kgarosi, Kabelo; Mashamba-Thompson, Tivani

VERSION 1 – REVIEW

REVIEWER	Ogilvie, Gina British Columbia Center for Disease Control
REVIEW RETURNED	20-Aug-2021

GENERAL COMMENTS	<p>In principle, this is an important topic, and I agree with the focused approach of this review to LMIC, where coverage for CC screening remains a huge issue. However, I feel there are critical elements the authors have missed/not discussed and these urgently need to be included to make this a worthwhile review.</p> <p>Introduction: I would put the L74-76 description with L83. I also feel there needs to be much more discussion that self-collection is only PART of screening. Engagement in care, at the VIA/colposcopy level following HPV testing is essential, or the screening offers no benefit. So both in the introduction and as part of the review, the engagement process is essential and needs to be examined.</p> <p>Methods: INclusion/Exclusion is fine but data MUST include follow up (did folks go for VIA or colposcopy after a +HPV test); HIV prevalence; rates of treatment; assay used; results returned (both for the HPV test and the follow through); whether VHT used. Again, w/o these, there is no use in screening. Should also say what is the value add compared to the (many) Self collection meta-analyses. Why not other LMICs (ie India) included?</p> <p>Discussion: Again, need to talk on the critical system issues and how follow up is essential</p>
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REVIEWER	Zelege, Eden Addis Ababa University, Innovative Drug Development and Therapeutic Trials
REVIEW RETURNED	21-Jan-2022

GENERAL COMMENTS	<p>Dear author/s, thank you for your hard work and getting us this protocol. I like the protocol. However, as a reviewer I have found some suggestions for you to correct.</p> <p>1. On the Abstract, please add rationale of the scope review under introduction section and change the sub-title "method and</p>
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	<p>analysis" in to "method" only. I would also remove ethics and dissemination section from abstract.</p> <p>2. About research question, isn't it possible to add research sub-questions to make it specific?</p> <p>3. What is your plan on how to handle missing items from included studies?</p> <p>4. please use the following link to download check list for PRISMA-ScR instead of using PRISMA checklist for systematic review and meta analysis. http://www.prisma-statement.org/documents/PRISMA-ScR-Fillable-Checklist_11Sept2019.pdf</p> <p>5. on line number 108, I would say " we used the following key elements to conceptualize the review question..."</p>
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REVIEWER	Habila, Magdiel The University of Arizona, Epidemiology and Biostatistics
REVIEW RETURNED	28-Jan-2022

GENERAL COMMENTS	<p>This scoping review seeks to summarize the use of HPV self-sampling as a method of screening for cervical cancer in Sub-Saharan Africa. The authors propose to include both qualitative and quantitative papers in their synthesis of the literature, which is a notable strength to the proposed design. Further research is needed into the acceptability of self-sampling in SSA because it addresses many of the concerns women have with conventional Pap smear and visual inspection methods. I thank the authors for contributing this work. I have the following recommendations for the authors to strengthen their protocol and review.</p> <p>The authors provide some information about the eligibility criteria for the studies that will be included in the review. However, additional information on the specific rationale for each inclusion and exclusion criteria will be beneficial in summarizing how this scoping review will address the gaps in the current literature.</p> <p>The authors state severally that there are many barriers to cervical cancer screening uptake in SSA, but do not explicitly state what those barriers are. The authors should provide context about why research on HPV self-sampling is needed and how self-sampling addresses the concerns the women have with other screening methods based on current literature.</p> <p>Line 201-203 authors state that the review is part of a larger study on self-sampling. Authors should state how this review will be used in that larger study- what impact will the review have on the study implementation?</p> <p>There seems to be specific interest in understanding acceptability of self-sampling in Zimbabwe, however this is not mentioned in the rest of the protocol. Authors should consider including sections describing how the findings of this review will be relevant for Zimbabwe, and for SSA in general, seeing as Zimbabwe may have certain contextual factors that influence self-sampling uptake that might not be true for other SSA countries.</p> <p>Authors do not describe anticipated limitations to the scoping review. Though the design is thorough, the anticipated strengths and limitations of the review and review process should be stated in the protocol.</p>
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REVIEWER	Molla, Wondwosen Dilla University, Midwifery
REVIEW RETURNED	28-Jan-2022

GENERAL COMMENTS	<p>First, thanks for allowing me to review the protocol entailed "Human Papillomavirus Self-sampling for Cervical Cancer Screening among Women in sub-Saharan Africa: A Scoping Review Protocol". My detailed comments are Below.</p> <ul style="list-style-type: none"> <input type="checkbox"/> The abstract is too long and contains too much material, particularly in the introduction section. <input type="checkbox"/> please minimize number of abbreviations in the abstract. It is not recommended. <input type="checkbox"/> Introduction part are so bulky. It is preferable to rewrite this section using only one page and covering the important aspect relating to your topic. <input type="checkbox"/> All Electronic Databases should include, they could be published in a different journal and electronic database <input type="checkbox"/> Your search only goes back to 2011; why limit it to this time period? You could have missed studies prior to 2011. Please explain why you limited the scope of your search to 2011-2021. It is more acceptable to include all database studies until 2021. <input type="checkbox"/> What kind of study do you want to include in this systematic review? It should be stated clearly. <input type="checkbox"/> what is your research question? It should be stated clearly. <input type="checkbox"/> what is the objective of this study? It should be stated clearly. <input type="checkbox"/> hoe do you measure it your outcome variable? it should be defin. <input type="checkbox"/> A systematic review and meta-analysis of Human papillomavirus self-sampling versus standard clinician-sampling for cervical cancer screening in Sub-Saharan Africa was published in the journal BMC on June 19, 2021. What is the significance of conducting this systematic review? You can
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VERSION 1 – AUTHOR RESPONSE

REVIEWER 1

Comment 1: I would put the L74-76 description with L83

Response: Thank you for the correction we have addressed it. L73-75

Comment 2: I also feel there needs to be much more discussion that self-collection is only PART of screening. Engagement in care, at the VIA/colposcopy level following HPV testing, is essential, or the screening offers no benefit. So, both in the introduction and as part of the review, the engagement process is essential and needs to be examined.

Response: Thank you for the comment, our main study focus is the acceptability of the method and users' perceptions and experiences, however, we have briefly touched on important considerations for successful implementation of self-sampling which include follow-up of screen positives as well as triage options (L78-82). We anticipate finding some of the issues highlighted when we synthesise findings from included studies.

Comment 3: Inclusion/Exclusion is fine but data MUST include follow up (did folks go for VIA or colposcopy after a +HPV test); HIV prevalence; rates of treatment; assay used; results returned (both for the HPV test and the follow-through); whether VHT used. Again, w/o these, there is no use in screening

Response: Thank you for the input, we appreciate this contribution, however, some of the points raised fall outside of the scope of our review. We anticipate finding studies that will only focus on women's perceptions or experiences with self-sampling where there is no actual self-sampling procedure, however, we appreciate that the follow-up of women is critical in the prevention of cervical cancer. We have included literature on the importance of follow-up in the protocol L79-82

Comment 4: Should also say what is the value add compared to the (many) Self collection meta-analyses

Response: Thank you for the comment. Our study uses a mixed-methods approach and sorely focuses on sub-Saharan Africa it captures more recent literature evidence and therefore complements existing evidence generated from other reviews on self-collection

Comment 5: Why not other LMICs (i.e. India) included?

Response: Thank you very much for the input. We understand the importance of including other LMICs such as India, however, this study sorely focused on countries in Sub-Saharan Africa that are comparable to Zimbabwe in terms of their socioeconomics and politics.

Comment 6: Discussion: Again, need to talk on the critical system issues and how to follow up is essential

Response: Thank you for this contribution, we have addressed this comment in our response to comment number 2 since they are referring to the same thing L78-82

REVIEWER 2

Comment 1: On the Abstract, please add the rationale of the scoping review under the introduction section and change the sub-title "method and analysis" into "method" only. I would also remove the ethics and dissemination section from the abstract.

Response: Thank you for the important suggestion, we have added a rationale to the study, on L27-29

Comment 2: About the research question, isn't it possible to add research sub-questions to make it specific?

Response: Thank you very much for the input. We would like to leave the research question as it is, as we feel that it is specific enough and adequate for this study

Comment 3: What is your plan on how to handle missing items from included studies?

Response: We are grateful for this important comment, we are going to contact the authors of the included articles with missing data to gain further insight into their findings L 122 - 123

Comment 4: please use the following link to download check list for PRISMA-ScR instead of using PRISMA checklist for systematic review and meta-analysis.

Response: Thank you very much for the correction, we downloaded and completed the PRISMA-ScR checklist

Comment 5: on line number 108, I would say " we used the following key elements to conceptualize the review question..."

Response: Thank you for the response, we have corrected L105-107

REVIEWER: 3

This scoping review seeks to summarize the use of HPV self-sampling as a method of screening for cervical cancer in Sub-Saharan Africa. The authors propose to include both qualitative and quantitative papers in their synthesis of the literature, which is a notable strength to the proposed design. Further research is needed into the acceptability of self-sampling in SSA because it addresses many of the concerns women have with conventional Pap smear and visual inspection

methods. I thank the authors for contributing this work. I have the following recommendations for the authors to strengthen their protocol and review.

Comment 1: The authors provide some information about the eligibility criteria for the studies that will be included in the review. However, additional information on the specific rationale for each inclusion and exclusion criteria will be beneficial in summarizing how this scoping review will address the gaps in the current literature.

Response: L2 Thank you for this comment. We have summarised the rationale for our inclusion criteria on L204 – 212 in the clean copy.

Comment 2: The authors state severally that there are many barriers to cervical cancer screening uptake in SSA, but do not explicitly state what those barriers are. The authors should provide context about why research on HPV self-sampling is needed and how self-sampling addresses the concerns the women have with other screening methods based on current literature.

Response: Thank you for the comment, we have highlighted some of the barriers that prevent women from participating in cervical cancer screening as well as the rationale for researching self-sampling and how these addresses concerns that women have with existing screening methods L83-89

Comment 3: Line 201-203 authors state that the review is part of a larger study on self-sampling. Authors should state how this review will be used in that larger study- what impact will the review have on the study implementation?

Response: Thank you for the response, we have highlighted the role of the scoping review as part of the larger study L198 - 202

Comment 4: There seems to be specific interest in understanding acceptability of self-sampling in Zimbabwe, however this is not mentioned in the rest of the protocol. Authors should consider including sections describing how the findings of this review will be relevant for Zimbabwe, and for SSA in general, seeing as Zimbabwe may have certain contextual factors that influence self-sampling uptake that might not be true for other SSA countries.

Response: Thank you for the comment. This scoping review is a part of the main study that will review current literature evidence on the subject of self-sampling in SSA. Currently, there is little to no literature evidence on the use and acceptability of self-sampling in Zimbabwe, we are therefore going to use the findings of this review and the research gaps highlighted to guide our planned research in Zimbabwe

Comment 5: Authors do not describe anticipated limitations to the scoping review. Though the design is thorough, the anticipated strengths and limitations of the review and review process should be stated in the protocol.

Response: Thank you very much for the comment, the strengths and limitations of the study are already highlighted in the text L216-219

Reviewer 4:

First, thanks for allowing me to review the protocol entitled “Human Papillomavirus Self-sampling for Cervical Cancer Screening among Women in sub-Saharan Africa: A Scoping Review Protocol”. My detailed comments are below.

Comment 1: The abstract is too long and contains too much material, particularly in the introduction section. Please minimize number of abbreviations in the abstract. It is not recommended.

Response: Thank you for this comment, we have limited the number of abbreviations in the abstract removed some of the unnecessary details.

Comment 2: Introduction part are so bulky. It is preferable to rewrite this section using only one page and covering the important aspect relating to your topic.

Response: Thank you very much for the comment, we have tried to rewrite parts of the introduction and also removed details that were not relevant for this study.

Comment 3: All Electronic Databases should include, they could be published in a different journal and electronic database

Response: Thank you for the response. We politely disagree with the reviewer. It is unrealistic and uncommon to search all electronic databases for eligible studies in a scoping review. We feel we can get sufficient information from the listed electronic databases as they have been purposefully selected based on what other researchers have done in the past.

Comment 4: Your search only goes back to 2011; why limit it to this time period? You could have missed studies prior to 2011. Please explain why you limited the scope of your search to 2011-2021. It is more acceptable to include all database studies until 2021.

Response: Thank you for the comment, we have explained our rationale for limiting the search to the period 2011-2021. L206-210

Comment 5: What kind of study do you want to include in this systematic review? It should be stated clearly.

Response: Thank you for the comment, we have corrected it by adding the information of the studies that will be included in the scoping review L115-118

Comment 6: What is your research question? It should be stated clearly.

Response: Thank you very much for the comment, we think our research question is clear and relevant for the scope of this study L103-104

Comment 7: What is the objective of this study? It should be stated clearly.

Response: The objective of the study is to map literature evidence on the use and acceptability of self-sampling for HPV testing for cervical cancer screening among women in sub-Saharan Africa IL105-106

Comment 8: How do you measure it your outcome variable? it should be defined.

Response: We will use Nvivo version 12 to extract themes from the included studies. We will conduct a thematic analysis of the findings from the included studies. L168-173

Comment 9: A systematic review and meta-analysis of Human papillomavirus self-sampling versus standard clinician-sampling for cervical cancer screening in Sub-Saharan Africa was published in the journal BMC on June 19, 2021. What is the significance of conducting this systematic review? You can read more about it at - <https://doi.org/10.1186/s13027-021-00380-5>

Response: Thank you for referring us to the systematic review and meta-analysis, it is a very important article however our study unlike the systematic review considers both qualitative and quantitative studies and we give more details on the acceptability of self-sampling and the reasons why different women populations chose or would choose self-sampling. The systematic review only has two studies that reported on acceptance of self-sampling and there is little detail about the reasons for acceptance of self-sampling in those studies